CLAIMS

1. A method for processing a computer aided polygon model, **characterized** by:

forming (310) a linear vertex array which is static and which contains the vertices of the image elements of the polygon model;

forming (320) a linear index array whose elements define the image elements of the polygon model by pointing at the vertices of each image element, and which linear index array comprises an active part, the image elements defined by the elements of the active part being included in the polygon model part to be presented graphically; and

modifying (350) the active part of the index array to change the image elements included in the polygon model part to be presented graphically while maintaining the linearity of the index array.

2. A method according to claim 1, **characterized** by presenting (370) graphically the polygon model part to be presented graphically.

3. A method according to claim 1, **characterized** by modifying (350) the active part of the linear index array by replacing an element of the linear index array with another element of the linear index array.

4. A method according to claim 1, **characterized** by forming (310) the linear vertex array in such a way that each vertex appears in the vertex array only once.

5. A method according to claim 1, **characterized** by forming (320) a linear index array in such a way that the linear index array further comprises a passive part, the image elements defined by the elements of the passive part belonging to the outside of the polygon model part to be presented graphically; and

modifying (350) the active part of the linear index array by moving at least one element of the linear index array between the active part and the passive part.

6. A method according to claim 1, **characterized** by registering (360) the modification of the linear index array in such a way that the linear index array is restorable to the state preceding the modification.

7. A method according to claim 1, **characterized** by receiving (330) a modification command to modify the active part of the linear index array; and

changing (340) the size of the active part of the linear index array on the basis of the modification command.

8. A method according to claim 1, **characterized** by receiving (330) a modification command to modify the active part of the linear index array; and

modifying (350) the active part of the linear index array on the basis of the modification command.

9. A device for processing a computer aided polygon model, **characterized** in that the device comprises:

a linear vertex array (410) which is static and which contains the vertices (110A to 122A) of the image elements of the polygon model;

a linear index array (430) whose elements (432 to 438) define the image elements (130A to 142A) of the polygon model by pointing at the vertices (110A to 122A) of each image element (130A to 142A), and which linear index array (430) comprises an active part (440), the image elements defined by the elements (432, 434) of the active part being included in the polygon model part to be presented graphically; and

a modification unit (450) to modify the active part (440) of the index array (430) to change the image elements (130A to 142A) included in the polygon model part to be presented graphically while maintaining the linearity of the linear index array (430).

10. A device according to claim 9, **characterized** in that the device further comprises a graphic user interface (460) for presenting graphically the polygon model part to be presented graphically.

11. A device according to claim 9, **characterized** in that the modification unit (450) is configured to replace an element (432, 436) of the linear index array (430) with another element (434, 438) of the linear index array (430).

12. A device according to claim 9, **characterized** in that the linear vertex array (410) contains each vertex (110A to 122A) only once.

13. A device according to claim 9, **characterized** in that the linear index array (430) further comprises a passive part (446), the image

elements defined by the elements (436, 438) of the passive part belonging to the outside of the polygon model part to be presented graphically; and

a modification unit (450) is configured to move at least one element (432 to 438) of the linear index array (430) between the active part (440) and the passive part (446).

14. A device according to claim 9, **characterized** in that the device further comprises a change array (470) for registering the modification of the linear index array (430) in such a way that the linear index array (430) is restorable to the state preceding the modification.

15. A device according to claim 9, **characterized** in that the modification unit unit (450) is configured to receive a modification command (452) to modify the active part (440) of the linear index array (430); and

the modification unit unit (450) is configured to change the size of the active part (440) of the linear index array (430) on the basis of the modification command (452).

16. A device according to claim 9, **characterized** in that the modification unit unit (450) is configured to receive a modification command (452) to modify the active part (440) of the linear index array (430); and

the modification unit unit (450) is configured to modify elements (432 to 438) of the active part (440) of the linear index array (430) on the basis of the modification command.

17. A computer program for processing a polygon model, **characterized** in that the computer program comprises:

a linear vertex array (410) which is static and which contains the vertices (110A to 122A) of the image elements of the polygon model;

a linear index array (430) whose elements (432 to 438) define the image elements (130A to 142A) of the polygon model by pointing at the vertices (110A to 122A) of each image element (130A to 142A), and which linear index array (430) comprises an active part (440), the image elements defined by the elements (432, 434) of the active part being included in the polygon model part to be presented graphically; and

computer-executable commands to modify the active part (440) of the index array (430) to change the image elements (130A, 142A) included in the polygon model part to be presented graphically while maintaining the linearity of the linear index array (430).

18. A computer program according to claim 17, **characterized** in that the computer program further comprises computer-executable commands to present graphically the polygon model part to be presented graphically.

19. A computer program according to claim 17, **characterized** in that the computer program further comprises computer-executable commands to replace an element (432, 436) of the linear index array (430) with another element (434, 438) of the linear index array (430).

20. A computer program according to claim 17, **characterized** in that the linear vertex array (410) comprises each vertex (110A to 122A) only once.

21. A computer program according to claim 17, **characterized** in that the linear index array (430) further comprises a passive part (446), the image elements defined by the elements (436, 438) of the passive part belonging to the outside of the polygon model part to be presented graphically; and

computer-executable commands to move at least one element (432 to 438) of the linear index array (430) between the active part (430) and the passive part (440).

22. A computer program according to claim 17, **characterized** in that the computer program further comprises a change array (470) to register the modification of the linear index array (430) in such a way that the linear index array (430) is restorable to the state preceding the modification.

23. A computer program according to claim 17, **characterized** in that the computer program further comprises:

computer-executable commands to receive a modification command (452) to modify the active part (440) of the linear index array (432); and

computer-executable commands to change the size of the active part (440) of the linear index array on the basis of the modification command (452).

24. A computer program according to claim 17, **characterized** in that the computer program further comprises:

computer-executable commands to receive a modification command (452) to modify the active part (440) of the linear index array (430); and

computer-executable commands to modify the active part (440) of the linear index array (430) on the basis of the modification command (452).